CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
COMPULSORY ENGLISH
(EN-102)

Total Marks: 10

Attempt any Two questions.

1. Write a paragraph describing your visit at Taj Mahal in Agra.
2. Write a letter to the Editor of a local newspaper highlighting the menace of open garbage system in your locality.
3. Write a conversation between yourself and your friend inviting him/her for tea at your house.
4. Write a short note on Summarizing.

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Advance Calculus
(MM-201)

Total Marks: 20

Attempt any two questions.

1. Find the nth order derivative of:

$$y = (ax + b)^m$$

or

$$y = \frac{1}{1 - x^2}$$

2. Explain Maclaurin's Theorem with suitable examples.
3. Differentiate between Gamma $\boldsymbol{\Gamma}$ and Beta $\boldsymbol{\beta}$ functions, proof that:

$$\beta(m, n) = \frac{\Gamma(m)\Gamma(n)}{\Gamma(m + n)}$$

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Advance Differential Equation
(MM-202)

Total Marks: 20

Attempt any two questions.

1. Use Eulers method to solve for $y[0.1]$ from $y'' = x+y+2xy$, $y(0)=1$ with $h = 0.02$. Also estimate how small h would need to obtain four-decimal accuracy.
2. Solve the differential equation $(3xy+y^2)dx+(x^2+xy)dy=0$.
3. Find the General Integral of the PDE

   $(2xy-1)z_x+(z-2x^2)z_y = 2(x-yz)$

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Descriptive Statistics
(ST-201)

Total Marks: 20

Attempt any two questions.

1. Discuss the Ratio Data.
2. What are Index Numbers? Discus the uses of Index Numbers.
3. Discuss the Time Series Analysis.

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Probability & Probability Distribution
(ST-202)

Total Marks: 20

Attempt any two questions.

1. Write the short notes on following:
   (a) Continuous Random Variable **(b)** Probability Density Function
   (c) Expectation and Variance **(d)** Standard Continuous Distributions
   (e) Covariance and Correlation
2. Explain the following:
   (a) Two Dimensional Random Variable **(b)** Marginal and Conditional Distributions
   (c) Bivariate Normal Distribution and its properties
3. What is Central Limit Theorem, Find the probability that the sample mean is between 85 and 92.

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Computer Fundamental
(CC-201)

Total Marks: 20

Attempt any two questions.

1. Explain about Web Browser.
2. What is an Operating System?
3. What is Internet working? Explain Repeaters, Bridges and Routers.

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****

CENTRE FOR DISTANCE AND ONLINE EDUCATION

Aligarh Muslim University, Aligarh
Session: January 2020
B.Sc. (Computer Science), Semester-IInd
Structured Programming Using 'C'
(CC-202)

Total Marks: 20

Attempt any four questions.

1. Write algorithm to:
   (a) Compute GCD of two integers in recursive mode.
   (b) Implement Tower of Hanoi
   (c) Test whether a number if prime or not by Rabin Miller test method.
2. Write a 'C' program to compute:
   (a) Sum of first n natural number **(b)** Whether a number is Armstrong or not
3. Explain pointers, their use and pointer to a pointer. What is dynamic memory allocation? Explain ***malloc***, ***calloc*** and ***free*** function.

Note: Send the Soft Copy of Assignment on cdeonlineassignments@gmail.com OR submit Hard Copy in CDOE Office, AMU, Aligarh.

****